BY ORDER OF THE COMMANDER
419TH FIGHTER WING

419TH FIGHTER WING INSTRUCTION 21-114

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Maintenance

ACCEPTANCE INSPECTION

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction assigns responsibilities and establishes procedures for F-16 acceptance inspections. It implements AFPD 21-1, *Managing Aerospace Equipment Maintenanc*e. References AFI 21-103, *Equipment Inventory Status and Utilization Repor*t; T.O. 00-20-1, *Preventative Maintenance Program General Policy Requirements and Procedures*; T.O. 00-35D-54, *USAF Material Deficiency Reporting and Investigating Syste*m; T.O. 1-1B-50, *Weight and Balance Dat*a; T.O. 1F-16C-6WC-1-11, *Preflight, End-of-Runway,Thruflight, Launch and Recovery,Quick Turnaround, and Basic Postflight Inspection Workcard*s; T.O. 1F-16C-10JG-00-11, *Aircraft Safet*y; AFRCI 21-101, *Aircraft Maintenance Guidance and Procedures;*AFCSM 21-556, *Air Force Computer System Manual* T.O. 1F-16C-6-11, *Scheduled Inspection and Maintenance Requirement*s. This applies to all aircraft maintenance personnel assigned to 419th Logistics Group (LG) and 419th Operation Group (OG).

SUMMARY OF REVISIONS

This document is substantially revised and must be completely reviewed.

1. Procedures. An acceptance inspection is accomplished on F-16 aircraft immediately after delivery. The aircraft records jacket and 781 binders will be delivered to plans, scheduling and documentation. No maintenance will start until the records have been reviewed and a Pre-Acceptance Inspection meeting has been conducted.

2. Responsibilities:

2.1. All personnel involved with acceptance inspections will document any missing, misconfigured, or damaged equipment or end item, on the AFTO Forms 781A, **Maintenance Discrepancy and**

Work Document, Engine Work Package (if applicable), and in the Maintenance Information System (MIS).

3. Fighter Squadron Maintenance (FSM):

3.1. **Plans, Scheduling, and Documentation Section (PS&D):**

3.1.1. Pre-acceptance Inspection Meeting. Conducted prior to aircraft entering into acceptance inspection. Pre-acceptance meeting is necessary to address all the shops involved with the aircraft about all the incoming maintenance write-ups that will require attention.

3.1.1.1. Works with Sortie Generation Flight (SGF) to ensure all delayed and incoming discrepancies are entered into MIS and appropriate AFTO Form 781 series forms.

3.1.1.2. Schedules the meeting and fill out AF Form 2410, **Inspection/TCTO Planning Checklist** with the necessary information to address the open work orders and any problems associated with them and their compliance.

3.1.1.3. Loads applicable acceptance Inspection Job Standard (JST) into CAMS.

3.1.1.4. Inspects the entire aircraft records jacket and document file for accuracy, corrects Time Compliance Technical Order (TCTO) status and time change requirements.

3.1.1.5. Monitors the dash 21 equipment transfers as prescribed by AFI 21-103, Chapter 9. Coordinates with weapons and munitions flight. Notifies LGQ of shortages.

3.1.1.6. Post Acceptance Inspection Meeting. Post acceptance inspection meeting is to ensure that all pre-determined jobs from the pre-acceptance inspection meeting were accomplished and the crew chief and his flight chief are satisfied with the condition of the aircraft.

3.1.2. **Sortie Generation Flight (SGF) (MAOA/B/C):**

3.1.2.1. Closes out incoming AFTO Forms 781A, **Maintenance Discrepancy and Work Document.**

3.1.2.2. Closes out incoming AFTO Form 781H, **Aerospace Vehicle Engine Flight Document.**

3.1.2.3. Closes out incoming AFTO Form 781J, **Aerospace Vehicle Flight Document.**

3.1.2.4. Closes out incoming AFTO Form 781K, **Aerospace Vehicle Inspection**, Engine Data, Calendar Inspection and Delayed Discrepancy Document, and ensure aircraft is in hangar (inspection can be performed outside, weather permitting).

3.1.2.5. Removes aircraft panels and opens aircraft doors as required for acceptance inspection.

3.1.2.6. Accomplishes acceptance inspection requirements of T.O.s 00-20-1, and 1F-16C-6WC-1-11.

3.1.2.7. Ensures main fuel shutoff valve (MFSOV) and cockpit switch guard configurations are in compliance with TCTO 1F-16-1977 and current Air Force Reserve Command (AFRC) directed one-time inspection requirements.

3.1.3. **Specialist Flight (MAOS):**

3.1.3.1. Accomplishes acceptance inspection requirements of T.O. 00-20-1 and **Attachment 1** of this instruction.

4. Maintenance Squadron

4.1. **Propulsion Flight:**

4.1.1. **Engine Management Branch (EMB):**

4.1.1.1. Inspects the engine document file for accuracy, corrects TCTO status, and time change requirements.

4.1.1.2. Verifies hourly engine inspections are within T.O. 1F-16C-6-11 time criteria.

4.1.2. **Engine Shop (LGMP):**

4.1.2.1. Accomplishes borescope inspection of engine.

5. Logistics Group (LG)

5.1. **Quality Assurance (LGQ):**

5.1.1. Ensures acceptance inspection JST has been loaded into CAMS. If CAMS is down or not available, hand scribes acceptance inspection requirements into aircraft 781 binder. Provides SGF with applicable acceptance inspection panel sheet.

5.1.1.1. Accomplish DD Form 365-1, **Chart A – Basic Weight Checklist Record**, equipment inventory.

5.1.1.2. Reviews aircraft 781 binder and engine work package (if applicable) for discrepancies found during the acceptance inspection and prepares a report as prescribed by T.O. 00-35D-54.

F.C. WILLIAMS, Brigadier General, USAFR
Commander

Attachment 1

F-16 WIRING/HARNESS INSTALLATION GUIDE

Selected Inspection Characteristics Form

MIL-W-5088E and the Air Vehicle

Specifications (16PS002 and 16PS006)

A1.1. Anti Chafing Provisions. Verify harnesses are routed to maintain required physical separation from equipment and structure. Closer than 3/8 inch at edges requires protection (non-pressure contact with a smooth nonabrasive surface is not considered chafing). Harness must be secured to prevent contact with edges of equipment and structure.

A1.2. Slack Wire and Cables. Verify that wires and cables do not have excessive slack. Ensure that sufficient slack is available to provide the following:

A1.2.1. One service replacement for connectors.

A1.2.2. Two service replacements for terminals.

A1.2.3. Room to disconnect harness connections when removing equipment and panels during routine maintenance without removal of other equipment and panels.

A1.2.4. To prevent mechanical strain on wires, junctions, and supports.

A1.3. Flight Control Harness. Verify that redundant branches are routed in separate clamps; where practical, a minimum of one inch shall be maintained between branches.

A1.4. Primary Support. Verify that only cushion clamps are used, distance between clamps does not exceed 24 inches, harnesses are not supported by other harnesses, and there is distinct physical separation from all fluid and gas carrying lines and tubes.

A1.5. Support at Connectors. Verify that termination at connectors are supported to dress wires in direction of wires.

A1.6. Clamp Size. Verify proper clamps are used to secure harness without crushing or deforming insulation of wires.

A1.7. Radius of Bend. Ensure minimum radius of bend is maintained:

A1.7.1. Unsupported wire or cable - 10 times diameter of wires or cable.

A1.7.2. At terminal strips - 3 times diameter wire.

A1.7.3. High density harness - 6 times diameter of harness.

A1.8. Multiple Grounds/Terminal. Verify that no more than four wires/terminals are connected by any one stud.

A1.9. Adjacent Connector. Verify that improper connection cannot be made when identical connectors are used in adjacent locations.

A1.10. Safety Wiring. Verify 1/2" red dot has been placed on structure adjacent to connectors requiring safety wire and connectors are correctly wired.

A1.11. Protective Covers. Verify that unmated connectors are properly capped with vapor tight protection covers. Use either a captive cover or a dummy receptacle.

A1.12. Provision Plugs. Verify that aircraft connector plug provided for future equipment or test purposes are secured by clamps or dummy receptacles.